

AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Canceled)

2. (Currently amended) An image coding apparatus comprising:

a coding circuit which codes an image signal to be coded, by using intra-frame coding scheme and/or inter-frame coding scheme; and

a reference mode selection circuit which sets selectively either a reference mode that uses a bidirectional coding in which a past frame and a future frame are referred to or a reference mode that does not use the bidirectional coding, as the inter-frame coding scheme, according to an coding execution environment in said apparatus,

wherein said reference mode selection circuit sets the reference mode that uses the bidirectional coding when an image represented by the image signal to be coded has a first resolution, and sets the reference mode that does not use the bidirectional coding when the image represented by the image signal to be coded has a second resolution which is higher than the first resolution, ~~according to whether the reference mode that uses the bidirectional coding or the reference mode that does not use the bidirectional coding is more suitable for the coding execution environment in said apparatus, with reference to a level of compression ratio.~~

3. (Currently amended) An image coding apparatus comprising:

a coding circuit which codes an image signal to be coded, by using intra-frame coding scheme and/or inter-frame coding scheme; and

a reference mode selection circuit which sets selectively either a reference mode that uses a bidirectional coding in which a past frame and a future frame are referred to or a reference mode that does not use the bidirectional coding, as the inter-frame coding scheme, according to an coding execution environment in said apparatus,

wherein said reference mode selection circuit sets the reference mode that uses the bidirectional coding when the image signal to be coded has a first frame rate, and sets the reference mode that does not use the bidirectional coding when the image signal to be coded has a second frame rate which is lower than the first frame rate, ~~according to whether the reference mode that uses the bidirectional coding or the reference mode that does not use the bidirectional coding is more suitable for the coding execution environment in said apparatus, with reference to a level of load caused by a coding processing.~~

4. (Currently amended) An image coding apparatus comprising:

a coding circuit which codes an image signal to be coded, by using intra-frame coding scheme and/or inter-frame coding scheme; and

a reference mode selection circuit which sets selectively either a reference mode that uses a bidirectional coding in which a past frame and a future frame are referred to or a reference mode that does not use the bidirectional coding, as the inter-frame coding scheme, according to an coding execution environment in said apparatus,

wherein said reference mode selection circuit sets the reference mode that uses the bidirectional coding when a bit rate of transferring the image signal to be coded has a first rate, and sets the reference mode that does not use the bidirectional coding when the bit rate of transferring the image signal to be coded has a second rate which is higher than the first rate, ~~according to whether the reference mode that uses the bidirectional coding or the reference mode that does not use the bidirectional coding is more suitable for the coding execution environment in said apparatus, with reference to a level of advantage on specifications in a case when the bidirectional coding is performed on the image signal.~~

5. (Previously Presented) An image coding apparatus according to Claim 2, wherein as the coding scheme said coding circuit codes the image signal by using a scheme complying with MPEG,

in the reference mode that uses a bidirectional coding, the coding is performed using I pictures, P pictures and B pictures, and

in the reference mode that does not use the bidirectional coding, I pictures and P pictures are used.

6. (Previously Presented) An image pickup apparatus, comprising:

an image input unit which takes an image of an object and acquires an image signal;

an image coding apparatus according to Claim 2, which codes the image signal; and

a data storage unit which stores coded data generated by the coding.

Claims 7-28. (Canceled)